

(12) AUSTRALIAN PATENT ABSTRACT

(19) AU

(11) AU-A-13950/83

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(54) ROTABLE BULB SPIRIT LEVEL

(75) KEN ROONEY

(21) 13950/83 (22) 17.5.82 (23) 26.4.83 (24) 17.5.82

(43) 24.11.83

(51)<sup>3</sup> G01C 9/28 G01C 9/34

(57) Claim

1. THE MULTILEVEL IS CONSTRUCTED OF ALUMINIUM BOX SECTION CLOSED IN AT BOTH ENDS.
2. IT WOULD BE CONSTRUCTED IN VARIOUS LENGTHS TO SUIT DIFFERENT APPLICATIONS.
3. THE BUBBLE COG ASSEMBLY FIG.1 CONSISTS OF A COMMERCIALY AVAILABLE BUBBLE HOUSED IN A HOLLOW NYLON COG, GLASSED IN AT EACH END.
4. THE BUBBLE ASSEMBLY IS ROTATED FROM THE END (DRAWING 1) BY A NYLON WORM GEAR FIG.2., OR FROM THE SIDE (DRAWING 2) BY A 20:1 REDUCTION NYLON GEAR DRIVE.
5. BOTH DRIVE SYSTEMS WOULD HAVE BRASS SHAFTS AND WOULD HAVE A SPRING LOADED RATCHET SYSTEM TO STOP UNWANTED MOVEMENT FIG.4.

13950/83

P/00/011



PATENTS ACT 1952-1973

Form 10

# COMPLETE SPECIFICATION

(ORIGINAL)

FOR OFFICE USE

Class:

Int. Cl:

Application Number:  
Lodged:

13950/83

Complete Specification—Lodged:  
Accepted:  
Published:

Priority:

Related Art:

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TO BE COMPLETED BY APPLICANT

Name of Applicant:

KEN ROONEY

Address of Applicant:

TINGHA RD INVERELL

Actual Inventor:

KEN ROONEY

Address for Service: "EL RANCHO" TINGHA RD INVERELL

Complete Specification for the invention entitled: MULTILEVEL

The following statement is a full description of this invention, including the best method of performing it known to me:—

\*Note: The description is to be typed in double spacing, pica type face, in an area not exceeding 250 mm in depth and 160 mm in width, on tough white paper of good quality and it is to be inserted inside this form.

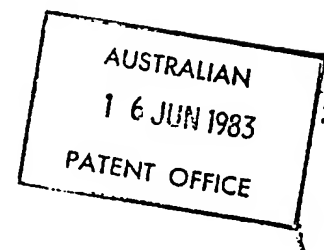
SPECIFICATION

3 SHEETS

SHEET 1

INTRODUCTORY STATEMENT

5. The invention called a Multilevel is similar to a conventional Spirit Level but with a rotatable level bubble assembly which allows it to check, decipher, transfer or set out any angle or level. Whereas a conventional Level only checks vertical or horizontal and sometimes 45 degrees.



SPECIFICATION

3 SHEETS

SHEET 2

DETAILED DISCRIPTION

The Multilevel consists of a level bubble (Fig 8) housed in a hollow cog assembly glassed in at both ends (Fig 1).

This assembly is rotated by either a worm drive gear from the end (Fig 2) or by a 20:1 reduction gear drive from the side (Fig 3).

- Both systems would have a ratchet system (Fig 4)
10. to stop unwanted movement.

There would be a fixed scale 0'-90' on both sides of the body (Fig 5). There would be an indicating arrow on the rotatable bubble assembly to indicate the angle checked. The Multilevel would have two

15. fixed bubbles to check vertical and horizontal.

The above is housed in aluminium box section closed in at both ends.

SPECIFICATION

3 SHEETS

SHEET 3

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. The Multilevel is constructed of aluminium box section closed in at both ends.
- 5) 2. It would be constructed in various lengths to suit different applications.
3. The bubble cog assembly (Fig 1) consists of a commercially available bubble housed in a hollow nylon cog, glassed in at each end.
- 10) 4. The bubble assembly is rotated from the end (Drawing 1) by a nylon worm gear (Fig 2) or from the side (Drawing 2) by a 20:1 reduction nylon gear drive.
5. Both drive systems would have brass shafts and  
15) would have a spring loaded ratchet system to stop unwanted movement (Fig 4).
6. The Multilevel would also have two fixed bubbles (Fig 8) to check vertical and horizontal.

Dated this...<sup>9TH</sup>.....day of...<sup>JUNE</sup>.....19.<sup>83</sup>..

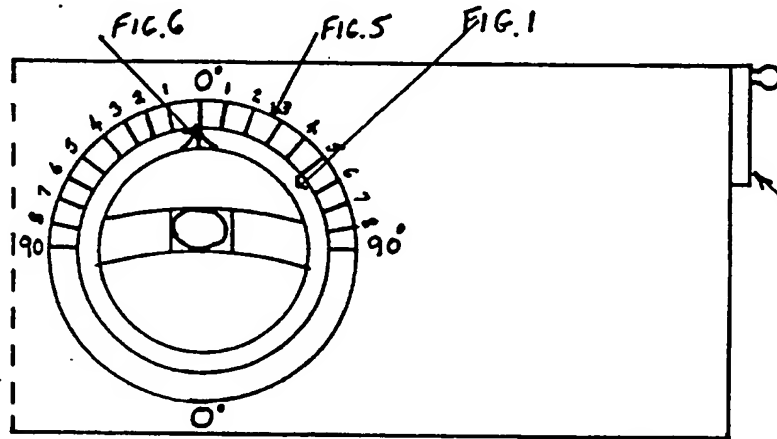
20)

KEN ROONEY  
NAME OF APPLICANT

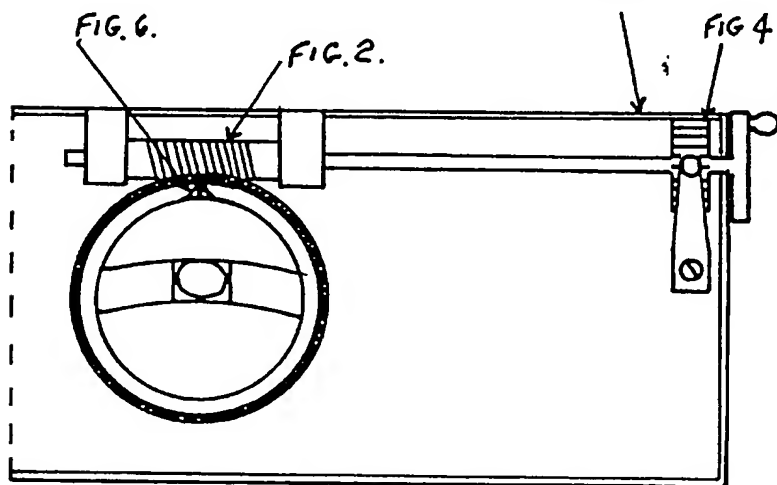
*Ken Rooney*

# GEAR ASSEMBLY FOR MULTILEVEL END ADJUSTABLE

SCALE: FULL SIZE

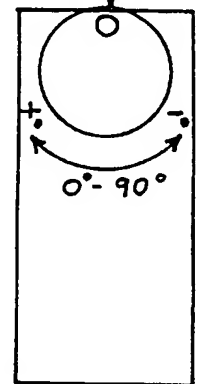


EXTERNAL SIDE VIEW

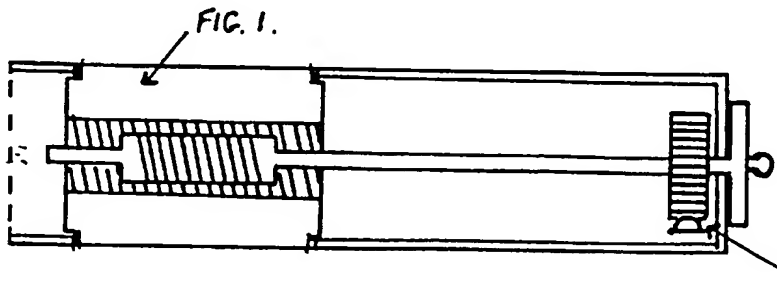


SIDE VIEW OF GEAR DRIVE ASSEMBLY

ADJUSTMENT  
WHEEL  
FIG 9

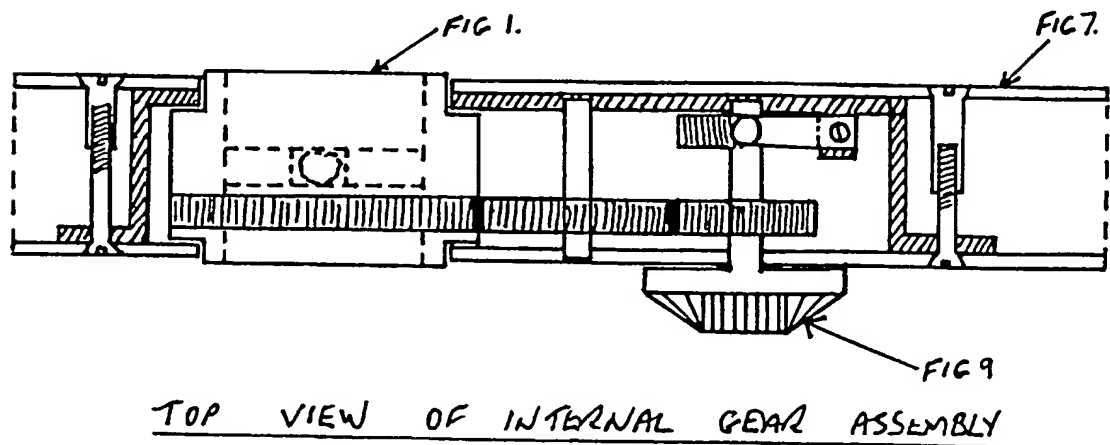
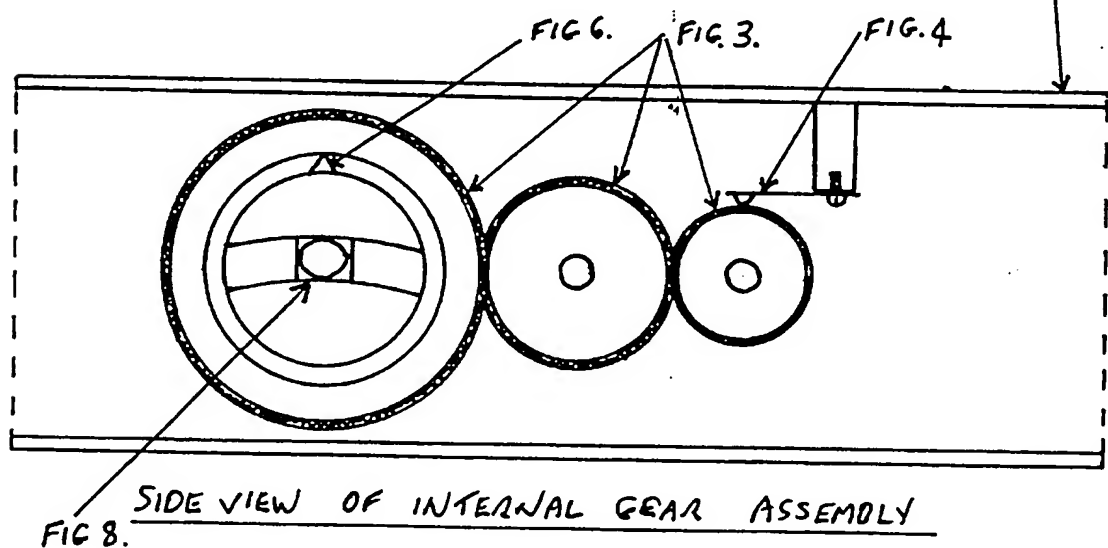
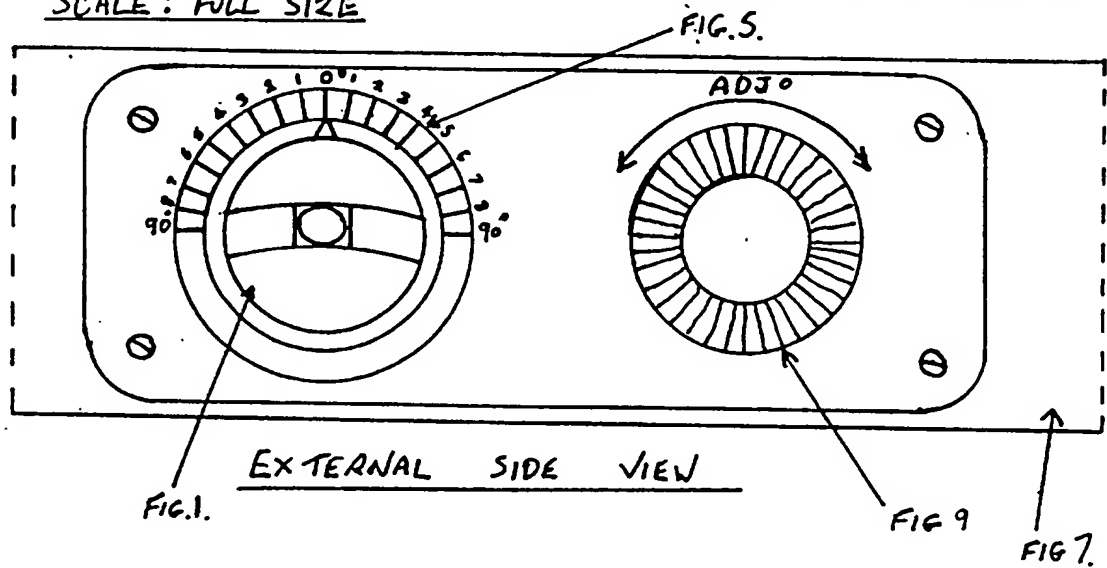


EXTERNAL END  
VIEW



TOP VIEW OF GEAR DRIVE AND RATCHET ASSEMBLY

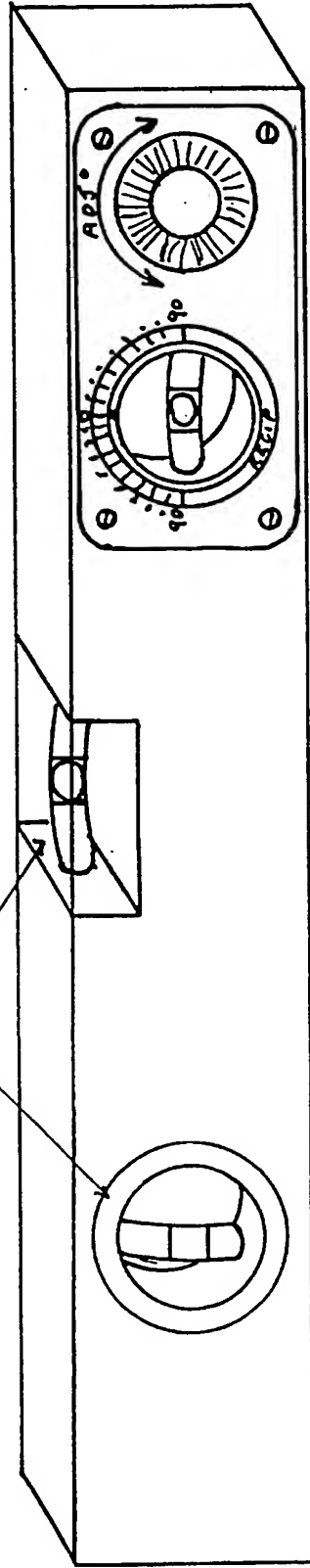
GEAR ASSEMBLY FOR MULTILEVEL SIDE ADJUSTABLE VERSION  
SCALE: FULL SIZE



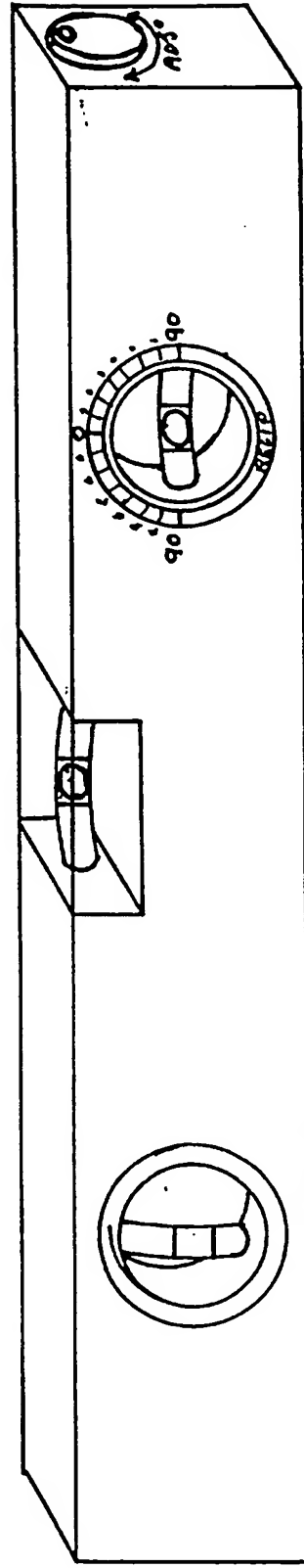
THE COMPLETED MULTILEVELS

NOT DRAWN TO SCALE

FIG 8



THE MULTILEVEL WITH SIDE ADJUSTMENT



THE MULTILEVEL WITH END ADJUSTMENT